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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,430

04/25/2006

Simon Cote

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EXAMINER

KAHN, RACHEL

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

08/25/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/567,430	Applicant(s) COTE, SIMON	
	Examiner RACHEL KAHN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 53-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 53-66 is/are rejected.
- 7) ☒ Claim(s) 54 and 62 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 53-66 are pending as amended on 6/5/09.

Response to Arguments

Applicant's amendments have been fully considered and overcome the following objections and rejections in the office action dated 2/5/09:

The objections to claims 11 and 27 have been withdrawn, as both claims have been cancelled.

The rejections of claims 1, 3, 4, 6-8, 11, 13, 24, 25, 29 and 30 under 35 USC 112 have been withdrawn, as Applicant has cancelled these claims. The issues resulting in the rejections of these claims are not present in the new amended claims.

The rejection of claims 1-3, 8-11, 14, 15, 24-27 under 35 U.S.C. 102(b) over Asai et al (WO 0183636); cited English Language version, US 2003/0114546, has been withdrawn as the claims have been cancelled. Furthermore, the rejection over Asai was based on Asai's teaching of polyethylene glycol dimethacrylate. Upon reconsideration, Examiner realized that polyethylene glycol dimethacrylate does not fulfill the requirements of the formula recited in original claim 10, and currently recited in amended independent claim 53.

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The rejection of claims 1, 5-15, 24-30 under 35 U.S.C. 102(b) over Cote (WO02/40559); cited US 7235297, has been withdrawn as the claims have been cancelled. The reference has been applied to the newly amended claims as shown below.

The rejection of claims 2-4, 29 and 30 under 35 U.S.C. 103(a) over Cote (WO02/40559); cited US 7235297, has been withdrawn as the claims have been cancelled.

Applicant's arguments regarding Asai have been fully considered, but are moot as the rejection has been withdrawn.

Applicant's arguments regarding Cote have been fully considered, and will be addressed as they apply to the current amended claims. Applicant argues that the cross-linked polyether taught by Cote is a copolymer, which requires at least two different components. Applicant argues that the instantly claimed subject matter relates to a polyether made from only one type of monomer. Examiner disagrees, as the language of the instant claims does not exclude the incorporation of other monomers in addition to the recited monomer.

Claim Objections

Claims 54 and 62 are objected to because of the following informalities: The claims list "ketone" twice. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 55, 57, 58, 63, 65 and 66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 55 and 63 recite "alkyl acrylate" as an option for the electron withdrawing group. First, it is unclear if the carbon-carbon double bond in formula 53 would be the double bond of the alkyl acrylate. Second, the location of the point of attachment on the alkyl acrylate to the polyether is unclear.

Claims 57, 58, 65 and 66 recite a value "n," but fail to define a range of suitable values for "n." For the purposes of examination, it is assumed that "n" is any integer greater than or equal to 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

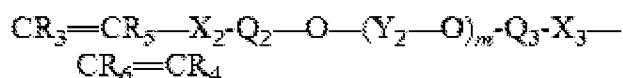
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 53-57, 59, and 61-65 are rejected under 35 U.S.C. 102(b) as being anticipated by **Cote** (WO02/40559). The US Patent version, US 7235297, will be cited in this office action.

Cote discloses a crosslinked polyether which is obtained by copolymerization of at least one monomer with a crosslinker having two polymerizable terminal end groups (col 4, lines 30-35).

The following formula, disclosed by Cote in column 4, line 58 to col 5, line 10, fulfills the recitations of instant claims 53-57, 59, and 61-65:

The cross-linker preferably comprises a PEG or PPG based polymer. For example, it may be a secondary cross-linker of the general formula



Cote discloses that the crosslinker is PEG or PPG based, fulfilling the instant recitations for "D" (col 4, lines 58-60). X_2 , Q_2 , X_3 and Q_3 may be nothing or alkyl (col 5, lines 3-8). R_3 and R_4 may be "H, H" (col 4, lines 65-67). R_5 and R_6 may be alkyl or aryl. It is the examiner's position that the generic formula in Cote is sufficiently limited in scope such that one of ordinary skill in the art would be able to "at once envisage" the compounds within the scope of the presently recited formula (MPEP 2131.02).

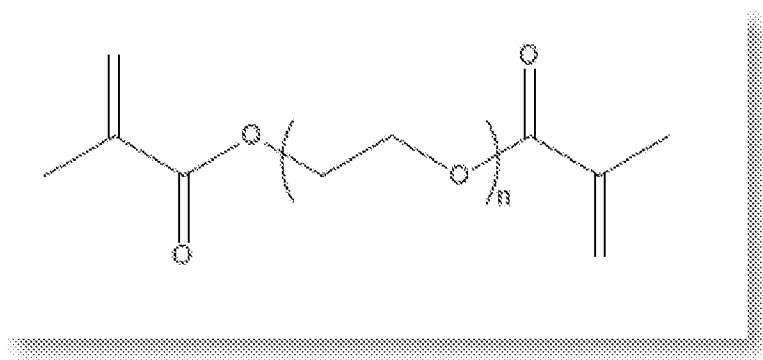
Instant claims 54 and 55 are dependent from claim 53, which recites electron withdrawing group as one of three options for C and E. Claims 54 and 55 are not worded so as to require the presence of an electron withdrawing group. As such, the claims are deemed anticipated by Cote, despite the fact that Cote does not disclose the species of claims 54 and 55. The same reasoning applies to instant claims 62 and 63, which depend from claim 61.

Claim 59 contains product by process limitations. Cote discloses a monomer that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim, although it may have been produced by a different process. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See MPEP 2113.

Allowable Subject Matter

Claims 58 and 65 are rejected under 35 USC 112 for the failure to define "n." However, if this issue is resolved, the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The formula of instant claims 58 and 65 is similar to, but differs from well known compounds such as polyethylene glycol dimethacrylate (cas no 25852-47-5), shown below:

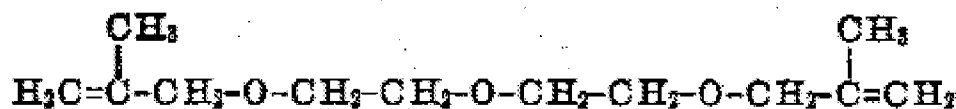


In the known compound, the carbonyls of the acrylate moieties are contained between the vinyls, while in the instantly claimed structure, the ester portions of the acrylate moieties are on the ends, outside the vinyls. Cote, which is considered the closest reference, fails to teach this structure. A substructure search using STN also failed to locate references which meet the formula of instant claims 58 and 65.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Britton et al (US 2201074) teach an unsaturated ether which fulfills the recitations of instant claims 53-57, 59, and 61-65 (p2, lines 45-48):



A rejection using such is not necessary at this time since it is analogous to Cote.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RACHEL KAHN whose telephone number is (571)270-7346. The examiner can normally be reached on Monday to Friday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RACHEL KAHN/
Examiner, Art Unit 1796

Rk

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796